



Special Ops

Tuesday, February 28, 2012

Incident Summary

Incident Location 13532 Cresspond Rd, Washington County

Location Description Schetromph Cave

Incident Date January 24, 2012

Incident Type Cave Rescue

Event Background

Washington County Fire & Rescue received the initial 911 call at approx 1745 hrs for a victim trapped 250' down in a cave. The victim was a member of a party of 4 cave explorers. His leg had become wedged in a narrow section of the cave and pinned behind him. His companions had made attempts to free him prior to calling 911 but were unsuccessful.

Upon arrival on scene, local responders determined that they would not be able to enter the space. As such, they provided the companions of the trapped victim with a portable radio, atmospheric monitoring equipment and an air chisel and requested that the cavers continue with their attempts to free the victim.

A request for assistance was forwarded to MCFRS by MEMA at approx 1645 hrs.

MCFRS units were dispatched at approx 1900 hrs to assist.

Upon the arrival of MCFRS units, no Fire/Rescue personnel had made entry farther than 10' into the cave. There had been no direct Fire/Rescue interaction with the victim, and the victim was still trapped.

Units Involved

Recon, Transport, and Support unit 731, Rescue Squad, Medic, and Support unit 729, Special Operations Chief and Unit 100 (US&R1)

Support Unit 729 used for personnel from FS3, FS17 & FS25

Initial FRS Actions and Observations

Units initially arrived on scene and were advised to stand by at the staging area remote from the site.

SP700, along with the OIC of FS31 proceeded to the incident location and received an initial briefing from US&R1 & the on-scene command staff. An IAP was developed and TRT personnel were brought into the scene to support operations.



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Companions of the victim that had exited the cave provided a detailed description of his status as well as the cave layout. Several pictures were provided that help orient the situation in the cave.



Two initial entry teams were designated from TRT personnel & were supplemented by an entry team from Frederick County ATR. TRT personnel also acted as the Technical Rescue Supervisor and Technical Safety Officer.

Initial FRS Actions & Observations (cont)

After receiving reports that the victim was freed from his impingement, it was determined that he would not be able to exit the cave without assistance, and the first entry team made access to the cave.

Entrant 1 of the primary entry team progressed approx 100' into the cave before accessing the victim; having negotiated a confined passageway that varied from 12" to 30" in width and 24" to 72" in height. The passageway also had successive vertical drops of 10-12' and 6'. The victim was found to have stable vital signs, but claimed to be very tired, having little feeling and use of his left leg. The victim's companion was also in the passageway, positioned behind the victim. The victim was placed in a class III harness and positioned so that Entrant 1 could assist his movement through the passageway by dragging him and lifting him over the vertical obstacles.

As Entrant 1 packaged the victim and began moving him towards the cave exit, Entrant 2 positioned himself at the point of the first vertical shaft which was 10-12' in depth and 12-18" wide. At this location Entrant 2 created a W3P2 anchor and set up an Aztec 5:1 MA system to haul the victim up the shaft. The victim was assisted to that location by entrant 1, then hauled up the shaft and assisted out of the cave. There he was loaded into a Stokes basket and lowered down the hill to the roadway. The victim was removed from the cave 33 minutes after the primary entry team had gone in.



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Lessons Learned & Suggestions

- According to varying sources, there are between 53 and 135 recognized caves in Maryland. Over 60% of them are in Washington County. Some have up to 4200' of navigable passageways.
- While significant discussion and effort went into providing heated air into the cave, the ambient temperature within the cave was actually significantly higher than the temperature of the outside air. Remember that the normal temperature below ground in this region is typically in the low-to-mid 50's year-round. Though providing heated air probably did prevent any unintended cooling of the inside atmosphere, the victim actually requested a jacket as he approached the heated air source, claiming it was the first time he felt cold.
- Initial information received led team members to believe that the victim was trapped down a 250' vertical shaft within a cave. However the greatest vertical drop encountered was no more than 12'. The "250' down in a cave" that was passed on referred to how deep the victim was within the horizontal cave passage. Crews were also misled with initial information that there were trained rescuers working within the cave upon arrival, as the "rescuers" being referenced by on-scene personnel were actually the victim's companions and had no fire/rescue training.
- Preconceived notions of a "cave" led team members and responders from other jurisdictions to believe that they would be operating in an open area within the earth, where standard confined space, ropes and rigging equipment could be used. This space was no more than a very narrow, jagged passageway; where in most parts only one person could fit at a time. The entry team had to remove most of their standard rope rescue gear and entered with a very minimal amount of equipment for moving the victim. Standard patient packaging devices such as the LSP Halfback and the SKED would have been ineffective in this environment.
- The need for a secondary or back-up light source in this environment can not be emphasized enough. This secondary light was often used to place a fixed beam on obstacles within the cave while the rescue party traversed them. Crews should also consider taking a number of light sticks with them into this environment as well for marking hazards and illuminating the entry/egress pathway.



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Incident Location **13532 Cresspond Rd, Washington County**

Lessons Learned & Suggestions (cont)

- This response was mutual aid technical rescue response not a federal task force deployment. Prior to dispatch coordination occurred between the FS31 officer, the Duty Chief, Battalion 703, and the Special Operations Chief. This coordination involved apparatus and personnel selection. The basic response for any event should include:
 - Recon 731 with wood trailer if appropriate
 - Transport 731 with the correct POD
 - Support Unit 731
 - Rescue Squad 729
 - Medic 729
 - Support unit 729
- Other apparatus must be left in station committed to the incident till adjusted by the Battalion Chief.
- As this response was outside the county and specific to a rope and then confined space event – specific personnel were selected. Personnel without Confined Space and/or Rope remained in-county. Had this been an in-county response all tech rescue personnel at consolidated stations would have responded.
- The initial response to all technical rescue events is limited to the on-duty consolidated station personnel. Personnel working on non-consolidated stations are to proceed to their designated consolidation points and await further direction. Personnel off-duty are not authorized to respond till directed. Authority for off-duty personnel to participate can only be given by the Tech Rescue Duty officer, Special Operations Chief, or Chief Officer on-scene.